

# The Lazy Person's Guide to Controlling Technologies

## Part I: E-Mailaholics Anonymous

*By Retired Air Force Major Dale J. Long*

### Losing Control

Over the last 15 years the computing environment has changed from one dominated by the laborious production of paper-based documents to one drowning in easily published computer-generated documents. The Internet has transformed from a relatively quiet, elite, scientific and technical community to an international playground with vast stores of information (and misinformation), a wide variety of entertainment and billions of dollars of commercial activity.

Older, less computer-savvy employees have left the workforce. These were the people who checked e-mail twice a day, at the same time every day, if they bothered to check it at all. They printed and filed their e-mail in a folder, could only deal with a printed telephone book and thought that a Boolean operator was someone running a telephone switchboard in a third-world country.

Younger workers, who have used computers their entire lives, are now gaining a toehold in the workplace. Need help figuring out your personal digital assistant (PDA), cell phone, computer or any software associated with them? Just ask the new 20-something kids in the information technology (IT) department. Do not expect to understand them, just let them tweak your device and hope you can still use it later. You may even remember having to do something similar when you were younger, and someone asked you to program or set the clock on a videocassette recorder. If only the new stuff could be as simple as that old VCR.

Yes, technology is a lot smarter. Instead of cordless telephones with 10-speed dial numbers, there are cell phones that hold 500 numbers, synchronize with the contacts list in your personal computer (PC), and remind you about birthdays, anniversaries and other significant events. VCRs, which used to be the apex of home entertainment confusion and convenience, are now being replaced by digital video recorders that not only record programs, they also remember what we watch and recommend (or even automatically record) other programs their programming determines we might like.

*Do you feel like you have lost control of your work environment? Do you become completely dysfunctional if you lose network connectivity or e-mail? Does your computer sound off with Eric Idle saying, "Message for you, sir!" when e-mail arrives?* Then this article is for you. Controlling technology has a double meaning: There is a difference between controlling technology and technology controlling you. In this issue, we will start with the most insidious addition to the work environment today: e-mail.

### E-Mail is My Life

I freely admit that I am a chronic e-mailaholic. I cannot resist the siren call of my e-mail alert sounds and have to stop what I am doing every time the alert goes off to check my mail. I cannot resist

endlessly assigning individual sounds to tell me who among my family, friends and co-workers have sent me e-mail. I am getting better, though. I have cut down to only three or four e-mail accounts, and my two main inboxes have fewer than 100 messages each at least once a month. While I still respond and reflexively check my inbox like one of Pavlov's dogs when the e-mail alert rings, at least I have stopped drooling.

I am not alone. E-mail not only dominates our desktop, but thanks to remote devices like Blackberry, it can follow us anywhere 24 hours a day. With return receipts telling senders when messages are both delivered and read, we have become significantly more accountable to everyone above, below and around us in the chain of command. We have learned to use e-mail return receipts for much the same purpose as routing cover sheets on staff packages. The main differences, though, are that it is much easier to send e-mails than to send paper files. The e-mail system records all the distribution and delivery information automatically and allows multiple deliveries with a single transmission.

To describe e-mail as an enabling technology greatly understates its influence. It has unleashed a flood of communication unparalleled in human history. Where the telephone at one time supplanted text as the primary means of business communication, e-mail has brought text back on top with a vengeance. However, e-mail might also be described as a debilitating technology. Here's a trivia question for you: *Which will lower your IQ more, smoking marijuana or addiction to e-mail?* Cannabis reportedly lowers an average IQ by about four points.

But, according to research announced earlier this year by King's College London University, constant use of e-mail can lower a user's IQ by 10 points. An article, by Martin Wainwright, described the research in *The Guardian* (<http://www.guardian.co.uk/online/news/0,12597,1465973,00.html>). According to the article, *"Dizziness, lethargy and an increasing inability to focus reached 'startling' levels in the trials by 1,100 people, who also demonstrated that e-mails in particular have an addictive, drug-like grip."*

*"Respondents' minds were all over the place as they faced new questions and challenges every time an e-mail dropped into their inbox. Productivity at work was damaged and the effect on staff who could not resist trying to juggle new messages with existing work was the equivalent, over a day, to the loss of a night's sleep,"* according to the article.

The most telling point in the article was that respondents had an almost complete lack of discipline in handling e-mails and felt compelled to reply to each new message. Ironically, it has taken me an hour and a half to write the last five paragraphs because I have received eight e-mails, five of which I felt compelled to answer immediately, the other three were spam. Maybe they are on to something.

## Through Thick and Thin

At this point in the discussion we should take a basic look at how e-mail systems work and how their operating principles affect their functionality. As with most computer-based applications, there are two main types of systems: thick client and thin client. In thick client, most of the processing is done on your PC. Most of us are familiar with Microsoft Outlook, Lotus ccMail, POP3 mail clients and similar products, which are specialized software applications loaded on a PC to manage e-mail accounts.

In thin client architecture, most of the data are processed centrally on a server and displayed on a PC. The most prevalent examples of this are Web-based mail systems where you access your account using a Web browser, e.g., Yahoo! Mail, Hotmail or Gmail. The e-mail server does all the heavy lifting, and the browser displays the results.

There are some services that support both thick and thin clients where you can access your e-mail either through a thick or thin client. For example, Yahoo! allows paid subscribers to use POP3 e-mail clients to retrieve their e-mail in addition to providing Web access to all account holders. Microsoft Outlook, the current household name in thick client e-mail, also has Web access functionality. Over the years there have been several shifts back and forth between thin client and thick client. In general, the ebb and flow between the two is regulated by yet another duality: processing power versus mobility.

Thick clients, so far, are more powerful and convenient than thin clients. The most obvious example of the power of the thick client is the ability to drag and drop objects. Click and hold on an e-mail to highlight it and then drag the mouse (or roll the trackball) to move the e-mail out of one folder and into another. You can also highlight and drag multiple files with one smooth move, clearly demonstrating the superiority of a thick client e-mail system over thin.

Then again, Web e-mail clients let you do essentially the same thing. Moving e-mail in the browser-based thin client system that I am currently using is as simple as adding check marks in boxes next to the items you want to move and then selecting the target folder from a drop-down menu. It takes me about the same amount of time as dragging and dropping without the ergonomic stress of having to hold down the mouse button while dragging.

The more sophisticated thick clients include integrated calendar and contact management features. Thick clients let you plug e-mail addresses into your message directly from your contact management address book. Thick clients automatically send e-mail reminders for scheduled tasks and appointments and let you view other people's schedules alongside your own.

Then again, I can do all that on my Yahoo! account through the Web browser. Yahoo! includes some fairly useful contact management features, including the ability to add any or all of the addresses from any message to my contacts list. I have used Yahoo!'s Web-based calendar for both personal and work

appointments, including comparing schedules with my staff, because we do not yet have a thick client at work that includes a calendar. Even if we did, I would rather use a single calendar for my schedule and for access with equal ease from both work and home. Why keep multiple schedules when I can have just one that includes everything?

OK, maybe thick clients are more secure. They do get points in this area for raising the security bar if your e-mail system will only accept contacts from a particular client that has been customized for your organization. Most clients, thick and thin, are equally vulnerable to e-mail viruses like Melissa, I Love You, Sobig F and Sober.N because they target features in the computer's operating system, not just in the e-mail client. However, many of these viruses are tailored to take specific advantage of a thick client's direct access to its own e-mail address book to automatically send a new wave of infected e-mail.



Most computer security people I know will argue that thick clients are more secure. Most system administrators will tell me that they are more robust. However, I find myself using my Web client more and more for all my e-mail accounts because of convenience without any noticeable security problems. As history has shown, convenience usually wins out in the end, so once Hotmail, Yahoo! or Google starts offering Voice over Internet Protocol (VoIP) service to go with its e-mail, calendar, contact list and weather updates, the resulting thin client current may just be too strong to resist.

## If I Had a Hammer

E-mail is the IT equivalent of a crescent wrench, a very useful tool that adjusts for a variety of nuts and bolts. Unfortunately, I believe in my crescent wrench so much that I often try to use it for tasks it is not well designed for.

Most of us are familiar with the semi-legendary "crescent hammer" that emerges when you have something that needs pounding and all you have handy is a crescent wrench. Fueled by desperation, unbridled optimism or sheer laziness we pound away with the wrench instead of dealing with the inconvenience or expense of finding the correct tool. Unfortunately, like the crescent wrench, e-mail is so pervasive that some people will try to use it for everything. Let's start by looking at what e-mail does well. E-mail is good if:

- *You want to send text.*
- *You need to send one or more attached files or links to files.*
- *You want to broadcast a message to a lot of people simultaneously.*
- *Your communication does not have to be real-time.*
- *You do not need immediate feedback from your recipient(s).*
- *You need to retain a copy of a message you have sent or received.*

E-mail is less effective as you move from these core competencies. For example, some people try to use e-mail as a poor man's workflow system to coordinate group discussions or staff work. Here are some of the basic principles of successful workflow:

## What we need is a 12-step program for e-mailaholics ...

- *The workflow process, including all actions and resources, should be both visible and transparent from beginning to end.*
- *Everyone should work from the same set of documents.*
- *Everyone, including team members who join in the middle of a project, should be able to see the work of everyone else at any point in the process.*
- *The workflow engine should centralize document and record management while allowing decentralized work by participants.*

Unfortunately, every e-mail system I have used, whether it has been on a mainframe, thick client or Web-based, suffers from the same basic problems preventing its effective use as a workflow system:

- *Because everyone has their own copy, no one can see anyone else's work until they are manually reconciled.*
- *Everyone gets their own copy of every message and attachments, which occupies a lot of storage space.*
- *All the e-mail files are stored in individual accounts, each of which may not include a complete set of documents associated with the workflow.*
- *Every new e-mail reply in a workflow iteration increases everyone's archive by the number of previous e-mails in the thread plus what was added. Even if the new comment is only, "Yes, that sounds good," you consume a lot of hard drive space with redundant information.*

Learning to distinguish between useful and not so useful can be difficult, particularly given the earlier comments about our tendency toward e-mail addiction. Yes, you can successfully complete simple, short workflows using e-mail. But, for any process that requires more than a few steps and participants, e-mail is best used only as a notification that there is work waiting for you in the system, and only if your portal or dashboard does not indicate this separately.

I am sure there are people who will disagree with me on this. But, unless you can show me how to run a large-scale business like eBay or Amazon using an e-mail system instead of a database as the primary workflow engine, you are not talking about true workflow.

### Take Control of the Beast

In the introduction I made a passing reference to people who only check their e-mail twice a day. While it may seem that I was poking fun at them, I am actually envious that they have the self-discipline to tame their e-mail beast by refusing to jump every time it calls. What we need is a 12-step program for e-mailaholics:

1. *Schedule e-mail time like you do meetings. Check it at set times and for set periods.*
2. *Turn off your e-mail alert sound.*

3. *Prioritize. When you check your e-mail, delete the obvious junk first. Then read the informational messages and delete them. Then read and answer the ones that need answering. You will find it is easier to concentrate on the important stuff if the entire inbox is less cluttered.*
4. *Resist the urge to check for any new messages until you have cleared out all the current ones.*
5. *When your e-mail time is up, leave your e-mail alone and work or talk to people face to face.*
6. *When composing e-mail, if your message becomes longer than one message window can display, pick up the telephone and call the sender. If after making a phone call you still need to send an e-mail, send anything longer than one screen as an attachment with a summary in the body of the e-mail.*
7. *When you read an e-mail that makes you mad, do not start typing. If you must respond, pick up the phone (or walk) and talk to the sender. If you are angry or annoyed while drafting an e-mail, do not push the Send button right away. Save the draft of your e-mail, go home, get a good night's sleep, and read it again the next morning. If it still looks good, fire away, but nine times out of 10 you will change it.*
8. *Do not try to use e-mail as a conferencing or workflow system unless you are willing to accept its limitations for group work.*
9. *Choose an e-mail concept of operations that matches your organization's operation instead of forcing your organization to conform to what everyone else appears to be doing.*
10. *If you have a mobile e-mail device, turn it off if you are in a meeting, theater, the bathroom or any other place where having it beep might be embarrassing or annoying for you or those around you.*
11. *Do not check your work e-mail while on vacation. You will live a longer, happier life.*
12. *Repeat after me: "If it is really important, they will call me, not send an e-mail."*

Over the last 20 years we have gone from happily living without e-mail to miserable living without it. E-mail has brought a much greater ability to communicate and fundamental social and cultural changes. It has also consumed an unaccountable amount of money, time and resources. *But, it does not have to take over your life unless you allow it to.* We will continue the discussion of how to take control of the technologies that often control us in the next issue.

### Until next time, Happy Networking!

*Long is a retired Air Force communications officer who has written regularly for CHIPS since 1993. He holds a Master of Science degree in Information Resource Management from the Air Force Institute of Technology. He is currently serving as a telecommunications manager in the U.S. Department of Homeland Security.* CHIPS